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 Fig. 7. Stipitis sectio longitudinalis cum parenchymate.
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IX.—*List of Coleoptera received from Old Calabar, on the West Coast of Africa.* By ANDREW MURRAY, F.L.S.

[Continued from vol. i. p. 333.]

[Plate VIII.]

Lycidæ (*continued*).

METRIORHYNCHUS, Guérin-Ménév.

1. *Metriorhynchus sulcicollis*.

Lycus sulcicollis, Thoms. Arch. Ent. ii. p. 78.

I have received two species which, I believe, respectively belong to Mr. James Thomson's *Lycus sulcicollis* and *Lycus semiflabellatus*. His description of the former is as follows:—

“Prothorax of a brownish black, with yellow sides; elytra yellow, with the posterior fourth black; underside black; base of the thighs yellow.

“Very elongated, almost parallel in the male. Female with the antennæ very broad, almost pectinated. Prothorax with the anterior margin very projecting in the middle; sides lightly sinuated, posterior angles sharp; base strongly bisinuated, in the middle a very deep channel, changing into a ridge in front. Elytra each with four strong ridges, the intervals regularly reticulated.

“Length 7 to 11 millims., breadth $2\frac{1}{2}$ to 4 millims.”

With all this my specimens agree; but they have also one or two other striking characters, which one would have expected to be mentioned if they were present. The black an-

tennæ, for example, have the terminal article of a pale yellow. The thorax, beside the ridge and groove, has four diverging minor ridges radiating from the middle ridge (fig. 1); and the reticulations of the elytra between each ridge are singly scalariform, as shown in fig. 2, and not doubly scalariform as in the next species.

Fig. 1.



Fig. 2.



2. *Metriorhynchus semiflabellatus*. Fig. 3.

Lycus semiflabellatus, Thoms. Arch. Ent. ii. p. 79.

Mr. Thomson's description of what I suppose to be this is as follows:—

"Above yellow, with the middle of the prothorax, the scutellum, and a little more than the posterior third of the elytra black; below, legs and antennæ black, as well as the base of the thighs, the middle of the metasternum and the last article of the antennæ yellow.

Fig. 3.



"Very elongated, slender, parallel. Antennæ very broad, with prolonged articles diminishing towards the extremity; prothorax angularly rounded in front, in the middle a ridge changing behind into a broad groove. Elytra straight on the sides, having each three strong ridges; intervals reticulated.

"Length $7\frac{1}{2}$ mill., breadth 2 mill."

The only difference between this and the description of the preceding species is that, while the elytra of *L. sulcicollis* have *four* strong ridges with the intervals "*regularly* reticulated," this has only *three* strong ridges with the intervals "*reticulated*," and that the scutellum of this species is black, while that of the other is not. The difference in reticulation is not alluded to; but the reader will see, on comparing fig. 4, which shows it in this species, with fig. 2 in the last, that it is an excellent distinction.

Fig. 4.



I am in doubt whether any difference is meant to be implied by the use of the different expressions "*reticulated*" and "*regularly reticulated*;" but the single scalariform interval appears more suggestive of regularity than the smaller and closer double scalariform interval, which is necessarily more crowded; and on that ground I have referred the "*regularly reticulated*" to *L. sulcicollis*; and I am the more supported in doing so by the scutellum (or, rather, the scutellar region) being black in it. The numerical difference of three strong ridges instead of four I cannot find: they all have four; and

I have come to the conclusion that the allotment of only three ridges to this species is a mistake on the part of Mr. Thomson. In all the allied *Lycidæ* the ridges are usually the same in number; and it seems by no means probable that in one section there should be two different species, so nearly allied to each other, yet having different numbers of ridges on the elytra. In many, however, and in particular in this species, the four ridges are not always observable at the base, the fourth being sometimes concealed or, rather, occupied by the shoulder; but nearer the apex they are all four always very visible.

Dascyllidæ.

PTILODACTYLA, Latr.

Ptilodactyla punctatostrata.

Nitida, castanea, elytris dilutioribus; thorace distincte et crebre leviter punctato; elytris punctato-striatis, interstitiis levissime sparsim punctatis.

Long. $2\frac{1}{2}$ lin., lat. $\frac{3}{4}$ lin.

Shining, chestnut-coloured, the elytra a little paler than the thorax. Head finely punctate and slightly pubescent. Thorax distinctly and (under a lens) rather deeply and thickly punctate, most closely on the sides and angles, not so closely but with larger punctures on the disk. Scutellum heart-shaped, with two raised lobes at the base, finely punctate. Elytra punctate striate, base and shoulders less so, the interstices finely punctate; the striæ disposed obliquely, except the sutural stria, which is straight; the shoulder separates two striæ, which unite about halfway down, those on each side of these again unite concentrically below them; the stria next to the sutural one is short, and fills a space left at the base by the oblique direction of the others.

This is another instance of the occurrence at Old Calabar of American forms (most nearly related to Brazilian types). *Ptilodactyla* is strictly an American genus, and has not hitherto been recorded as met with in the Old World.

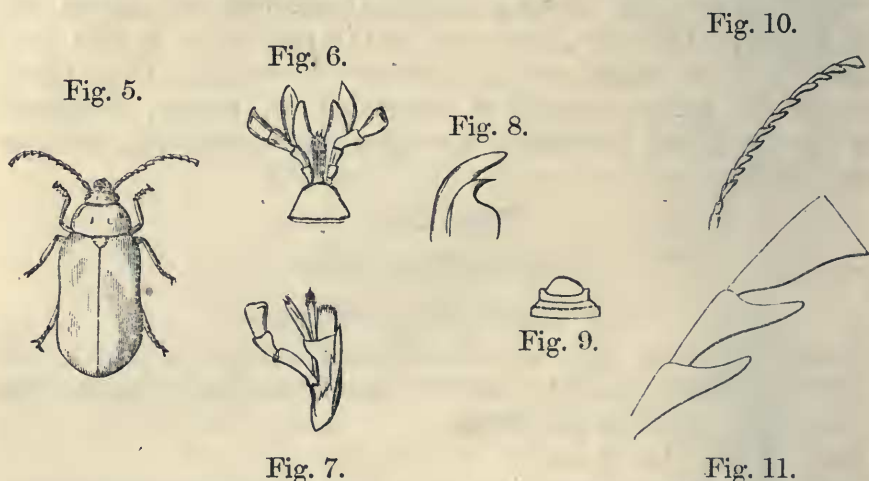
COPTOCERA*, nov. gen.

(Fig. 5; and details, figs. 6–11.)

Mentum subtriangulare, apice truncato. Ligula quadrilobata, lobis duobus utroque latere conicis magnis ciliatis (fig. 6). Maxillæ lobo exteriori in duos lobos diviso rectos tenues et ciliatos; lobo interno lato, apice truncato, forsan semifisso

* From κόπτω, *I cut*, and κέρας, *a horn*, in allusion to the truncate termination of the last article of the antennæ.

marginē interno (fig. 7). Palpi labiales et maxillares articulo ultimo subsecuriformi. Mandibulæ sat prominentes arcuatæ, apice fortiter bidentatæ (fig. 8). Labrum antice rotundatum (fig. 9). Caput declivē; epistoma antice rectum. Oculi sat parvi parum prominentes. Antennæ (fig. 10)



dimidio corporis longitudine, fere æquales, fortiter serratæ, articulo primo brevi sat parvo, secundo minuto, ceteris fere æqualibus latis, tertio parum longiore, ultimo truncato (fig. 11). Prothorax transversalis, postice latior, ad basin fere recte truncatus, parum bisinuatus. Scutellum postice rotundatum, sat magnum. Elytra lata, antice subparallela, pone medium dilatata, apice late rotundata. Pedes mediocres; tarsi mediocres, articulis primis quatuor trigonis, bilobatis, bilamellatis, lamellis latis et magnis, quinto unguiculis robustis. Carina prosternalis brevis et tenuis. Corpus crassum, convexum, postice parum dilatatum.

Coptocera galleruoides.

Lævis, nitidissima, testaceo-ferruginea; antennis, apice mandibularum, palpis, tibiis tarsisque nigris. Capite antice oblongo, biimpresso, impunctato; thorace sat convexo, impunctato, disco bifoveolato, lateribus parum explanatis et reflexis, postice impressis. Scutello mitriformi. Elytris levissime seriatim punctulatis, stria suturali et stria laterali prope humeros fortius punctatis, lateribus bisinuatis, margine reflexo, humeris et disco ante medium et pone medium separatim elevatis. Subtus fulvo-pubescens.

Long. 9 lin.; lat. elytrorum ad basin $3\frac{3}{4}$ lin., pone medium 5 lin.

Smooth, very shining, testaceo-ferruginous, with the antennæ, the palpi, the apex of the mandibles, and the tibiæ and

tarsi black. The head impunctate, biimpressed in front. The thorax rather convex, impunctate, with the disk bifoveolate and the sides somewhat expanded and reflexed, and impressed near the posterior angles, which, although acute on the great scale, are inflexed and rounded at the tip, the anterior angles obtuse and rounded at the apex; base nearly straight. Scutellum mitre-shaped. Elytra very faintly impressed with a series of punctures in rows; but there is a sutural line or stria and an anterior marginal one, both of which are pretty deep and strongly punctate; the sides are bisinuate, and the margins reflexed; the shoulders and the disk near the scutellum and before the middle, and the disk behind the middle, all separately raised into prominences. Beneath fulvo-pubescent, the pubescence longest on the metasternum. Abdomen rather flat and somewhat soft.

This species looks exceedingly like some of the tropical Gallerucidæ, as *Agelocera*, *Rhombopalpa*, &c. It does not appear to have been common, a few specimens only having been received.

Elateridæ*.

APHANOBIUS, Esch.

Aphanobius seclusus, Cand. Elat. iv. p. 322.

Several specimens received.

The genus *Aphanobius* has hitherto been supposed to be peculiar to the East. Ten species are described by Candèze. Of these, four are from the Mauritius and five from other parts of the Indo-Malayan district—Singapore, Java, India, China, &c.; the occurrence of the only other species (the present) at Old Calabar is, as I think, an evidence either of a connexion between Africa and India, or else of a great geological antiquity of the generic form. The presence of many other Indian forms in Africa makes the former the more probable explanation; and the greater diffusion of such Indian forms would seem to indicate that the connexion was probably of a much older date than that which seems to have existed between the west coast of tropical Africa and the opposite coast of Brazil.

CRATONYCHUS†, Boisd. & Lacord.

Cratonychus umbilicatus, Gyll., Cand. Elat. iii. p. 322.

This is the only species in the large genus *Cratonychus*

* All the Elateridæ which I had then received from Old Calabar were placed by me in Dr. Candèze's hands at the time he was engaged on his great work on that family, and were therein described. A few additional species have since been received.

† I do not agree with my friend Dr. Candèze in his reasons for abandoning the old name *Cratonychus* and substituting *Melanotus*.

which is found out of the limits of the northern hemisphere : all the rest come from Europe, Siberia, North America, &c. I think we must regard it as a straggler which has passed the barrier of the Sahara either before or after it became dry land. It appears to be distributed all over Africa proper, having been met with in Senegal, Guinea, Old Calabar, the Cape of Good Hope, and Caffraria.

CARDIOPHORUS, Esch.

Cardiophorus accensus, Cand. Elat. iii. p. 178.

One or two specimens received.

MELANOXANTHUS, Esch.

Melanoxanthus melanocephalus, Germ. Zeitsch. v. p. 191 ;
Cand. Elat. ii. 512.

Elater melanocephalus, Thunb. Nov. Spec. Ins. Diss. iii. p. 63 ; Oliv.,
Fab., Herbst, &c.

Var. *subsuturalis*.

This species seems nearly cosmopolitan. It is found, not rarely, in Brazil. It occurs in India, the Malaccas, and generally in all the tropical regions of Asia from Arabia to China. It has also been met with in Madagascar and the Mauritius, and Bourbon Island.

The specimen (only one) which I have received from Old Calabar agrees with the ordinary type, with the exception that the black mark on the thorax is a little wider and extends further back on the thorax, and that the black apex of the elytra extends further up them and runs narrowly and feebly up the suture for a short space. I have therefore treated it as a variety.

HETERODERES, Latr.

Heteroderes coctus, Cand. Elat. ii. p. 366.

This is one of the commonest of the Elateridæ of Old Calabar.

ISCHIODONTUS, Cand.

Ischiodontus monachus, Cand. Elat. ii. p. 120.

One specimen received.

PSEPHUS, Cand.

§ 1. Third article of antennæ smaller than the fourth.

1. *Psephus limonioides*.

Generi *Limonio* facie similis (ex. gr. *Limonio fulvipilis*, Cand.),
fusco-niger, parum nitidus ; fronte convexa, antice im-

pressa, breviter fulvo-pilosa, fortiter punctata; prothorace parum elongato, profunde ac dense punctato, convexo, postice breviter canaliculato, sat longe præsertim lateribus et disco fulvo-piloso, angulis posticis longis et parum divaricatis; elytris punctato-striatis, interstitiis subrugose granulatim punctatis, fulvo-pilosis; antennis nigris; pedibus testaceo-ferrugineis.

Long. $4\frac{1}{2}$ lin., lat. $1\frac{1}{3}$ lin.

Similar in general appearance to the genus *Limonius*, and more especially to the *Limonius fulvipilis*, Cand. Subcylindrical in form, fuscous black, slightly shining. Head thickly and strongly punctate and fulvo-pilose, convex, with a well-marked transverse impression close to the margin of the keel. Antennæ black or brownish black, with the second and third articles minute. Prothorax deeply and very closely punctate, fulvo-pilose, especially on the sides and disk, convex, with a short distinct smooth canaliculation behind, longer than broad, narrowest in front; sides sloping to the front, where they are rounded in; the posterior angles long and slightly divaricated, keeled along their outer margin, also shortly in the middle and on their inner margin, sharp at the apex. Scutellum elongate pentagonal. Elytra of the breadth of the thorax, nearly parallel or very slightly dilated until beyond the middle, not very much attenuated at the apex, punctate striate, the striæ not very strongly punctate, the intervals flat, subrugosely granularly punctate. Legs testaceo-ferruginous, fusco-pubescent. Lamellæ on the second and third tarsi only.

Three specimens received.

2. *Psephus brevipennis*, Cand. Elat. ii. p. 27.

Several specimens received.

3. *Psephus macrophthalmus*, Cand. Elat. ii. p. 26.

Only one individual received.

4. *Psephus elimatus*, Cand. Elat. ii. p. 22.

Only one specimen received.

§ 2. Third article of the antennæ as large as the fourth.

5. *Psephus conicollis*.

Fuscus, parum nitidus, griseo-pilosus; fronte fortiter sat dense punctata, convexa, antice impressa; prothorace convexo, sparsim subleviter punctato, postice leviter canaliculato, latitudine majore, ab angulis posticis sensim angustato, angulis posticis carinatis; elytris leviter punctato-striatis, in-

terstitiis planis, granulatim subrugosis; subtus castaneus, abdomine parum dilutiore; pedibus castaneis, tarsis secundis et tertiis lamella instructis.

Long. $4\frac{1}{2}$ lin., lat. $1\frac{1}{2}$ lin.

Conical in front, and conical or subcuneate behind. Fusous, slightly shining, griseo-pilose. Head convex, impressed in front, rather coarsely and somewhat densely punctate. Prothorax broader than long, convex, faintly punctate (most so in front), and clothed with a longish pubescence, with a slight longitudinal canaliculate depression behind, gradually narrowed from the posterior angles to the anterior angles, the posterior angles carinated. In one of my specimens the exterior outline of the posterior angles is slightly rounded, which may be a sexual difference. Scutellum elongate, mitre-shaped. Elytra wedge-shaped or conical at the base, nearly as broad as the base of the thorax, gradually attenuated to the apex, feebly punctate striate, the intervals flat, subgranulously transversely rugose. Below chestnut, darkest on the thorax; metathorax thickly punctured all over, rather deepest on the sides, the punctures so close to each other as to meet. Legs chestnut. Lamellæ on the second and third tarsi.

Two specimens (probably male and female) received.

6. *Psephus nitidus*.

Statura *P. conicollis*, minor, rufo-castaneus, nitidus, vix pilosus, fronte punctata; prothorace leviter punctato, postice fere impunctato; elytris levissime striato-punctatis, interstitiis parum elevatis, transversim subrugosis.

Long. $3\frac{3}{4}$ –4 lin., lat. 1 lin.

Similar in form and sculpture to *Psephus conicollis*, smaller, reddish chestnut, almost without hairs, shining. Head punctate, anteriorly very slightly depressed. Prothorax conically rounded to the front, finely and sparingly punctate, more especially behind, posterior angles rounded in, carinate. Scutellum elongate, mitre-shaped. Elytra very finely punctate striate, interstices slightly elevated, transversely granulously subrugose. Underside and legs same colour as the upperside. Metathorax very coarsely punctured on the sides, but finely punctured on its disk, the punctures scattered and not touching each other.

Only one specimen received.

7. *Psephus striatopunctatus*, Cand. Elat. ii. p. 21.

Several specimens received.

8. *Psephus beniniensis*, Cand. Elat. ii. p. 21.

Only one or two specimens received.

OLOPHÆUS, Cand.

Olophæus gibbus, Cand. Elat. ii. p. 15.

This varies considerably in size, some being very nearly twice the size of others.

TETRALOBUS, Lepell. et Serv.

1. *Tetralobus Chevrolatii*, Cand. Elat. i. p. 374.

In my specimen I observe one character not noticed by Candèze in his description, viz. that the spine of the prosternum is deeply canaliculate.

One specimen.

2. *Tetralobus subcylindricus*.

Nigro-brunneus, pube fulvo-sericea brevissima sat dense vestitus, punctatissimus, elongatus, elytris subcylindricis; fronte punctata, postice linea lævi carinata, antice excavato, carina frontali transversali subrotundata; prothorace crebre et sat fortiter punctato, inæquali, subquadrato, antice lateribus rectis et parallelis, angulis anticis rotundatis, angulis posticis divaricatis, apice retrorsum flexis, subtus grosse sparsim punctatis; elytris subparallelis, prope medium levissime dilatatis, creberrime leviter punctatis, haud striatis, obsoletissime nervatis, apice angulis suturalibus rotundatis; subtus mesosterno et metasterno sat longe fulvo-pilosis; abdomine fulvo-sericea pube vestito, ischiis fere parallelis, transversim depressis, interne parum incisus, vix dentatis.

Long. 19 lin., lat. 6 lin.

Brownish black, clothed with an excessively short but dense silky fulvous down, thickly punctured, elongate, rather narrow, transversely convex, so as to appear almost subcylindric, at least as regards the elytra. Head rather coarsely punctate, behind with a slight smooth raised line, in front with a deep longitudinal excavation; the frontal transverse keel subrotundate, in some aspects like a truncate triangle with the corners rounded and the middle slightly sinuate. The prothorax closely and rather coarsely punctate, unequal on its surface, slightly depressed on each side of the middle in front, also on the disk, and on each side behind the middle, and with a small oblique distinct fovea near the posterior angles; the sides parallel, margins rounded in, anterior angles rounded, posterior strongly divaricate, with their apex slightly incurved, and with a small raised tubercle in their middle; base with a lobe in front

of scutellum. Scutellum rounded at the base, wedge-shaped at the apex. Elytra convex, subcylindrical, subparallel, a very little dilated about the middle, very thickly and finely punctate, without striæ, but with some obsolete traces of nervures near the base; sides with a slight bent keel at the base, the sutural angle at the apex rounded. Underside of prothorax much more coarsely, but not nearly so closely punctate as the upper surface, the spine with a slight appearance of keel on each side near the base; the mesosternum and metasternum clothed with rather long fulvous hair; the abdomen with fine down only, as on the upperside. The posterior haunches are of nearly equal breadth throughout, with a transverse depression of no great depth; the free margin at the inner end slightly notched, but very slightly, if at all, toothed.

Only one specimen received. It is most nearly allied to *T. punctatus* from Senaar, both having the thorax very much punctate; but its shape is different, and the elytra in this species are not nearly so much costate as in *punctatus*.

ALAUUS, Esch.

Alaus Candèzei.

Niger, squamulis cinereis cervinis fuscisque marmoratus; antennis haud longitudinem thoracis æquantibus, fuscis, articulis primis tribus nitidis et pubescentibus, ceteris opacis et velutinis, valde serratis; prothorace latitudine longiore, lateribus parum depressis, sinuato, parallelo, angulis posticis divaricatis, carinatis, apice retrorsum flexis; elytris pone humeros et postice depressis, antice fortiter punctato-striatis, versus apicem punctis levioribus instructis, apice subemarginato, angulis externis rotundatis, suturalibus submucronatis; subtus pube magis concolori vestito; mesosterno et metasterno pilosis; abdomine segmentorum marginibus extus subdenticulatis.

Long. 14 lin., lat. $4\frac{1}{2}$ lin.

Black, densely clothed with ashy and fawn-coloured scales, marbled and peppered with brown. Antennæ very strongly serrate, brown, the first three articles shining and pubescent, the remainder opaque and velvety. Head concave in front. Prothorax longer than broad, disk most convex behind the middle, with the sides subparallel, sinuate, and somewhat depressed; anterior margin bisinuate; posterior angles diverging, keeled, their apex slightly incurved. Scutellum sloping more in front than behind, obovate. Elytra depressed towards the apex and behind the shoulders, punctate-striate, the punctures distinctly apart from each other, deepest outside the shoulder, less deep

towards the suture, and gradually diminishing as they approach the apex, which is subemarginate, with the external angles rounded and the sutural angles turned outwards and feebly mucronate. Below more uniform in tint; the mesosternum and metasternum pilose; the abdomen with the margins of its segments subdenticulate at the external angle. In the female the pencilled margin of hairs on the free margin of the last segment of the abdomen is composed of singularly shaped hairs, somewhat club-shaped, or like an irregular knob on a thin stalk—cherries on a stalk, in fact, only the cherries are not round.

The African species to which this comes nearest is *A. senegalensis*; but it differs in the prothorax not having a broad longitudinal median canal, in there not being a tubercle on it in front of the median lobe, in the sides being sinuate instead of rounded, in the elytra not being tubercular at their base, in their apex not being bidentate, and in their third interval not being more raised than the others. It has more resemblance, however, to some of the Malayan species.

Only one specimen (a female) received.

LACON, Lap.

Lacon sordidus, Cand. Elat. i. p. 114.

Of this species I have one specimen, given to me by Mr. Fry, who had acquired it from Mr. Gray, of Glasgow, with the locality marked as Old Calabar. Mr. Gray was in relations with my friends the missionaries, and I have no doubt that his locality is to be depended on. The only habitat given by Candèze for the species is Senegal.

My specimen is probably immature, being chestnut-coloured instead of black. It may be worth mentioning, as a character not noticed by Candèze, that the scales on the elytra are disposed in pairs on the intervals between the striae, and are arranged obliquely, pointing backwards towards each other, so that it gives them the appearance of a plaited flat rope.

DILBOTARSUS, Latr., Cand.

Dilobotarsus cornutus, Cand. Elat. Nouv. p. 8 (1864).

Castaneus, elytrorum apice ochraceo, pilis albidis et ochraceis hic et illic sparsim irroratus, lineari-elongatus, angustus, subcylindricus; fronte excavata, luteo-squamulosa; prothorace inæquali, antice latiore, lateribus sinuatis, apud marginem anticum tuberculis duobus, transversim granulose multistriolato; elytris anguste linearibus, granulose crebre

punctatis, obsolete nervosis, basi pilis ochraceis obductis, fascia saturatius castanea ante apicem pilis albidis et postice pilis ochraceis marginata, altera fascia interrupta vel potius linea tenui transversa interrupta punctorum albidorum paulo pone scutellum; antennis pedibusque castaneis. Long. 5 lin., lat. $1\frac{1}{2}$ lin.

Chestnut, with the apex of the elytra paler or ochraceous and a band immediately before the lighter space darker chestnut, and here and there spattered with whitish and ochreous scales; linear-elongate, narrow, subcylindric; the head excavated in front, clothed with yellowish-white hairs. Prothorax broadest in front, unequal, with depressions on the sides and in front of the scutellum, and with two rather large tubercles near the anterior margin; sides sinuate, covered with numerous transverse fine granulous striæ, giving the effect of punctures. Scutellum black, deeply sunk in the elytra, nearly vertical, elongate, with the apex rounded and somewhat knobbed. Elytra narrowly linear, granulously thickly finely punctate, obsoletely costate, clothed with ochraceous hairs on each side of the scutellum, and with two interrupted slender bands of white scales, the anterior one a little behind the scutellum, confined to one or two small spots of white hairs or scales, the posterior immediately in front of the darker band of chestnut, which is just before the pale apex; the anterior margin of this pale apex is clothed with ochreous-yellow scales, which gives a light border to each side of the darker band, making it appear darker in colour than it really is. The antennæ and legs chestnut. Underside of body brown, except the sides and margins of the sutures and segments of the abdomen, which are chestnut.

The above description was written before I saw that given in Dr. Candèze's '*Elatérides Nouveaux*,' and I have allowed it to stand, as perhaps useful to some as a second description, and at all events convenient to those who may not possess the Supplement to Dr. Candèze's '*Elateridæ*,' which has been published under the above title in the *Mémoires* of the Roy. Acad. of Brussels.

This is another instance of the occurrence of Brazilian forms at Old Calabar. No *Dilobotarsus* has previously been found out of South America; and as it is a genus of remarkable characters and striking form, there is no room for referring its affinity to some other type which may occur in the Old World. It is what I should term a crucial example of the occurrence of a purely American form in Africa proper. But another noteworthy circumstance is, that this species is not (as is the case with most of the strictly American forms which we have

recorded from Old Calabar) confined to the west coast of Africa, but is also found on the east coast. I know of three specimens in different collections—my own from Old Calabar, one from Natal, in the collection of Mr. Janson, from which Dr. Candèze's description was taken, and one from Algoa Bay, in the collection of Mr. Wilson Saunders, nearly twice the size of (but still the same as) the other two.

Eucnemidæ.

*OISOCERUS**, nov. gen., De Bonvoul.

This remarkable genus has not yet been published; and I had intended that its first appearance should be in M. de Bonvouloir's work on the *Eucnemidæ*, on which he has been for some time engaged. As, however, I have now reached the place in my list where it comes in, I have asked my friend M. de Bonvouloir to favour me with an advance copy of his description, which he has kindly done; so that I am able to give the reader that eminent entomologist's own description of this giant of his group, in anticipation of that in the work itself:—

"Genus *OISOCERUS*.

"Head strongly convex, tolerably deeply sunk in the prothorax; epistome continuing directly the curve of the forehead, forming a very obtuse angle with the latter, and consequently distinctly bent in as regards the head, slightly narrowed at its base, with its anterior margin arched in front. Mandibles only showing exteriorly a surface transversely arched and narrow, very much crossed, with a long and sharp point. Antennæ distinctly shorter than the half of the body, more or less strongly flabellate. Pronotum short, strongly attenuated in front; marginal ridges and prosternal sutures converging in front. Propectus not canaliculated below along the external ridge, showing laterally a single marginal line obliquely converging in front, starting from the posterior angles and reaching the anterior angles, deflexed, without another supplementary line. Propleura tolerably broad, subtriangular. Prosternal sutures rectilinear. Prosternum without mentonnière, with its anterior margin raised in a keel very slightly sinuated in the middle. Metathoracic episterna subparallel; epimera invisible. Posterior haunches furnished with an upper transverse blade tolerably narrowed on the outer side, and raised above the abdominal surface so as to leave a free passage for the thighs to rest in. Legs rather narrow, scarcely thickened

* From *οἶσος*, a willow, and *κέρας*, a horn, in allusion to its flabellate antennæ.

at the summit. Tarsi cylindrical, with the penultimate article simple.

"This genus is extremely remarkable, not only by its facies but by its characters, and cannot be confounded with any other of the family of *Eucnemidæ*: It appears to approach a little to the genus *Phlegon*, but is distinguished from it very easily by the structure of its antennæ as well as by the penultimate article of its tarsi being simple.

"*Oisocerus Murrayi*, Be Bonv. Pl. VIII. fig. 5.

"Oblongo-elongatus, postice tantum leviter attenuatus, obscure brunneus, supra pube fulvescente brevi dense vestitus; capite sat fortiter dense rugoseque punctato, clypeo medio valde excavato; antennis pronoto multo longioribus longiusque flabellatis articulo tertio flabellato (♂), vel pronoto vix longioribus brevius flabellatis articulo tertio dentato (♀); pronoto latitudine multum brevior, lateribus sinuato, basi media bipunctato, medioque foveis duabus sat profundis notato, minus fortiter dense rugoseque punctato; elytris distincte striatis, interstitiis leviter dense transversim rugose punctatis; lobo prosternali basi depresso; pedibus rufo-brunneis.

"Long. 9-10 lin., lat. $3\frac{1}{2}$ lin.

"Body oblong-elongate, slightly attenuate in its posterior third only, slightly convex, of a reddish brown, somewhat opaque, covered above with a yellowish short and dense pubescence. Head tolerably distinctly punctate, punctuation very close and rugose. Epistome slightly narrowed at the base, distinctly broader than the space between it and the eye, strongly excavated transversely in its middle. Forehead scarcely visibly depressed in its midst in front, marked in some with a small longitudinal keel extending backwards to the vertex, and absent in others. Antennæ very short, passing distinctly (♂) or scarcely (♀) the posterior angles of the pronotum; in the ♂ the third article is prolonged in a very elongated compressed branch, about twice as long as the first two articles united, the remainder similarly prolonged, with their branches becoming gradually longer towards the extremity, the last subequal to the preceding; in the ♀ the third article is simply prolonged into a strong internal tooth, which is nearly equal to the rest of the article, the fourth into a narrow branch of the length of the first two articles united, the remainder similarly prolonged, and gradually becoming a little longer towards the apex; in both sexes the antennæ are covered by a very close yellowish pubescence. Pronotum nearly twice as broad as long, sufficiently distinctly attenuated in front and very distinctly sinuated on each side above the

posterior angles, which are strongly prolonged behind, with a punctuation a little less strong than that of the head, but very dense and very rugose; marked in the midst of the base with two small punctiform depressions, and with a longitudinal line which reaches the anterior margin; moreover, marked on each side in its middle by a transverse or subrounded, tolerably large and very deep depression. Scutellum elongate quadrate. Elytra oblong, subparallel, slightly attenuated in their posterior third, very distinctly striated, their intervals scarcely convex, finely, very densely, and very rugosely transversely punctate. Underside of body of a deeper reddish-brown colour. Propectus tolerably distinctly and not very densely punctate in the middle, more rugosely on the sides. Prosternal projection rather strongly depressed in the middle of its base, with its sides somewhat raised, very slightly narrowed in its posterior half, and almost subrounded behind, then abruptly and strongly inflexed and terminated below in a sharp point. Abdomen very finely, very densely, and somewhat rugosely punctate. Legs and tarsi of a deep reddish brown."

Apparently rare, only a few specimens having been received.

Buprestidæ.

CORÆBUS, Cast. & Gory.

1. *Coræbus nodifrons*.

Ænescenti-brunneus, subopacus, subpunctatus, aciculatim rugosus, pube cinerea et nigra irregulariter vestitus; elytris pube nigra bifasciatis prope apicem, et versus apicem pube ochracea notatis; capite nodoso; thorace impresso; elytris apice denticulatis; subtus nitidus, æneus, fulvo-pubescent, aciculatim rugosus.

Long. 5 lin., lat. $1\frac{1}{3}$ lin.

Brown, with a slightly greenish brassy tinge only visible from some points of view, subopaque, subpunctate, acicularly transversely rugose, clothed with a fine longish grey or ash-coloured pubescence, irregularly mixed with black, which is disposed in two bands near the apex of the elytra, where a few ochraceous hairs occur both on the black bands and along their sides. Head vertical, with the epistome slightly raised, being divided off by oblique grooves on each side; from it a deep longitudinal groove runs back to the vertex, making two longitudinal tubercles highest behind on each side of the head, which, however, are slightly interrupted, so that from some points of view there would appear to be four tubercles besides the epistome, while from others there only appear two, which

are very prominent when seen from behind. Eyes moderate. Thorax subquadrate, unequally impressed, a large fovea in the lobe in front of the scutellum, two others placed obliquely on each side of it, a transverse one in front, and a triangular one on the inflexed side, which is sinuate; posterior angles obtuse, and posterior margin of median lobe truncate, straight. Scutellum triangular. Elytra with the shoulders not very prominent, and the apex fimbriated with fine denticulations. Underside shining æneous, fulvo-pubescent, aciculary rugose. One specimen.

(Subgen. *Polyonychus*, Chev.)

This subgenus is not accepted by Lacordaire nor by Kiesenwetter, although the former so far inclines to adopt it as to point out the characters which distinguish it from *Coræbus*, and the latter divides *Coræbus* into two sections, of which the one has the characters of *Coræbus* as restricted by Chevrolat, and the other those of this genus (*Polyonychus*). Although the seizable generic characters are trifling, the difference in facies is tolerably marked; and I therefore think it a useful section, worthy of being preserved, particularly in a family which is so numerous, and of which the species are so much alike as the *Agrilidæ*. The true *Coræbi* are the broader flat species with irregular patches or bands of different coloured pubescence, of which *C. rubi* may be taken as the type, while the more uniformly metallic and less banded species, such as *C. elatus*, compose the genus *Polyonychus*. It is to be observed, however, that the name is not happy; for both *Coræbus* and *Polyonychus* have equally the claws of the tarsi split in two.

2. *Coræbus* (*Polyonychus*) *viridanus*, Cast. & Gory, Monogr. Bupr. t. 3. f. 15.

One specimen.

3. *Coræbus* (*Polyonychus*) *sophoroides*.

Agrilo Sophoræ affinis, thorace antice latiore; elytris apice et fascia prope apicem pilis albidis leviter et sparsim obtectis. Long. $2\frac{1}{4}$ lin., lat. $\frac{1}{2}$ lin.

This species differs in the following respects from Castelnau and Gory's description and figure of *Agrilus Sophoræ*, to which it was referred by some continental entomologists to whom I sent it. In the first place the tarsi are short, more especially the first article, which is inconsistent with the genus *Agrilus*, in which Castelnau and Gory place *Sophoræ*. Passing that, it is, like it, a small bright-green insect like an *Agri-*

lus, but, although more elongate than most of the *Coræbi*, has a good deal of the facies of that genus. Its surface is very granular, and the head has a slight impression in the middle. The thorax may be said to be nearly square, but is certainly not broadened behind, as said by Gory, but in front. As in *A. Sophoræ*, its disk is convex in front, with a strong transverse impression behind, and a hollow which comes from each side to unite with the posterior angles, which are sharp; but the bottom of this hollow space is not purple, but of a brilliant fiery copper or brassy green; that, however, is not a point of any importance; neither, perhaps, is it that the underside is black, with very little æneous hue, instead of being bronzy. The legs, too, nearly correspond, being (especially the posterior ones) of a bright coppery golden hue, which is near enough to Gory's description—"a brilliant golden green." But Gory takes no note of a peculiarity which could not fail to strike him had it been present in his species, viz. that there is a transverse band of whitish scales near the apex, and the apex itself is clothed with similar scales.

It is possible enough that this *may* be Gory's *A. Sophoræ*, and that the differences which I have pointed out are due to his having had rubbed specimens to describe from, or to errors in his description: but I am not entitled to take this for granted; and as it certainly does not agree with his description, nor with his figure, I have no alternative but to describe it anew under a fresh name. Whether it is new or not, I think there is no doubt that it ought to come into the metallic section (*Polyonychus*) of the *Coræbi*, and that it does not properly belong to the genus *Agrilus* as restricted either by Lacordaire or by Gory himself.

AGRILUS, Curtis.

1. *Agrilus ignicollis*. Pl. VIII. fig. 1.

Sat crassus, supra viridis, thorace cupreo-rubro, subtus niger, pallide pubescens; capite convexo, levissime aciculato, leviter longitudinaliter impresso, canali angusto secus marginem interiorem oculorum, oculis minus convexis; thorace antice latiore, transversim plicato, angulis posticis obtuse rotundatis, angulis anticis projicientibus; elytris aciculatim punctatis, apice cuneato-truncato, denticulato, fascia parva apicali albido-piloso; tarsis primo articulo sat longo.

Long. $3\frac{1}{2}$ lin., lat. $1\frac{1}{4}$ lin.

Rather stout; above bluish green, with the thorax fiery copper; below bluish black, with a slight pale pubescence.

Head convex, faintly aciculated, slightly impressed longitudinally, and with a narrow canal on the inner margin of the eye; eyes rather flat. Thorax without impressions, narrowed behind, transversely plicate, with the posterior angles obtusely rounded, the anterior angles projecting, anterior margin sinuate; posterior basal median lobe moderate. Scutellum broad and ridged in front, acuminate behind. Elytra aciculary punctate, with the apex cuneate-truncate, denticulate, and clothed with a small band of whitish pile. Underside aciculary punctate, with a frequent short pale pubescence. Tarsi moderate in length, the first article long, longest in the posterior tarsi.

Several specimens received.

2. *Agrilus Bonvouloirii*.

Subopacus, capite et thorace brunneo-ænescentibus, elytris viridibus; elongatus, capite et thorace aciculatim transverse plicatis; elytris subrugose aciculatim punctatis; subtus æneo-cupreus.

Long. 5 lin., lat. 1 lin.

Above somewhat dull; head and thorax brownish brassy; elytra green, with a purplish tinge when looked at horizontally from before or behind; the underside shining greenish coppery brassy; elongate, nearly of the size and shape of *Agrilus biguttatus*, but a little smaller and more attenuated in front. Head irregularly transversely and obliquely aciculary plicate, the plicæ curved; a narrow longitudinal depression down the forehead, and a narrow canal along the inner margin of the eye. Thorax transverse, transversely finely plicate, unequal, broader than long, slightly narrowest in front; anterior margin nearly straight, sides subparallel; basal margin with the median lobe short, broad, and its sides oblique, a curved raised space at each posterior angle, with a sinuate depression winding round in front of it. Scutellum broad at the base, with a transverse basal ridge, acuminate at the apex. Elytra aciculary subrugosely punctate, with a basal triangular fovea at the inner side of the shoulder, slightly expanded behind the middle; apex conical, sharply denticulate. Underside bright shining greenish coppery brassy, bluish under the thighs, aciculary punctate, the segments of the abdomen not much more thickly punctate in front than behind. Tarsi as long as the tibiæ, first joint as long as all the rest put together.

One specimen.

3. *Agrilus capensis*.

A. Bonvouloirii affinis, forsan varietas ejus, fronte magis ex-

cavata; elytris postice purpureis; abdomine segmentis crebre antice punctulatis.

Long. 4 lin., lat. $\frac{3}{4}$ lin.

This may be a small variety or one of the sexes of *A. Bonvouloirii*; but there are one or two points of distinction which seem to me to warrant its being provisionally described as distinct. It is smaller, and the elytra are purple behind, that colour encroaching more or less on the green at the base; the head is more deeply excavated; the scutellum is bi-ridged transversely at the base, and the segments of the abdomen are finely and closely punctate along the anterior margin.

Several specimens have been received. I am informed by Mr. Edward Saunders that in some cabinets it stands under the unpublished name of *A. capensis*, which I have preserved.

4. *Agrilus Saundersii*. Pl. VIII. fig. 2.

Ænescenti-olivaceus, apice parum cupreo; elytris punctis, sex albedo-pilosis (duobus ad basin, duobus ante medium, duobus propinquieribus post medium) instructis.

Long. $3\frac{1}{2}$ lin., lat. $\frac{3}{4}$ lin.

In general appearance similar to *Agrilus sexguttatus*, but smaller and narrower in proportion, also similarly marked with six small spots of white scales. Brassy olivaceous, slightly coppery at the apex of the elytra; surface finely granulous. Head with the forehead very prominent, and with a longitudinal groove separating it into two lobes. Thorax subquadrate, slightly widest in front, transversely finely aciculary rugose, behind with a broad transverse curved depression concave to the front, with a slightly deeper impression in the middle and another on each side. There is also a somewhat curved impression near the middle in front; median lobe short, curved. Scutellum small, triangular. Elytra finely granular, with a small depression, full of whitish scales, at the inner angle of the shoulder; and a larger median depression, filled with whitish scales, somewhat before the middle, and a still larger one (although all actually small) behind the middle and closer to the suture; the apex doubly emarginate, more deeply next the suture, with a large tooth at the sutural angle and another at each of the external angles: exterior to this external tooth there are one or two minute denticulations. Underside and legs greenish brassy, sparingly clothed with a longish whitish pubescence. The upper margins of the segments as seen beyond the elytra clothed with whitish pubescence. Posterior tarsi with the first article equal in length to the three following; in the anterior tarsi the first article not quite so long.

Two or three specimens.

I have named this species after Mr. Edward Saunders, in recognition of the services he has already done in rescuing a portion of the Buprestidæ from the confusion in which they lay—services which all entomologists must hope will be continued and extended to other groups.

MYCHOMMATUS*, nov. gen.

Caput parum excavatum, secus marginem internum oculorum canaliculatum; epistoma antice parum emarginatum. Antennæ breves, articulis primis, secundis et tertiis obconicis, primis majoribus, secundis et tertiis æqualibus, ceteris fortiter serratis, transversis, undecimis emarginato-truncatis. Prothorax depressus, brevis, transversalis, lateribus canaliculatis, postice latior et medio lobato. Scutellum sat magnum, planum, transversum pentagonale, antice arcuatum. Elytra elongata, disco plano et subdepresso, a basi ad apicem gradatim attenuata, apice parum expanso, rotundatim truncato, dentibus fimbriato. Ischia postica margine antico excavato, margine libero late curvatim emarginato. Tibiæ posticæ extus pilo fimbriatæ, anticæ simplices; tarsi sat robusti, lamellis omnes instructi, articulis brevibus, postici articulo primo parum elongato, ceteri fere æquales: unguiculi sat fortes, breviter fissis. Metasternum antice protensum, medio profunde emarginatum. Prosternum depressum, antice truncatum, postice projiciens. Corpus elongatum, depressum, cuneatum.

This genus has the cuneiform facies of *Stenogaster*, differing apparently only in being smooth and shining, instead of unequal and marbled with irregular pubescence, &c.; and *Stenogaster* being wholly Brazilian, at first I regarded it as another instance of the presence of a South-American form on the west coast of Africa; but the presence of lamellæ on all its tarsi removes it from that category. Its facies, however, seems to require the establishment of a new genus for its reception, the shortness of the tarsi preventing its taking a place among the *Agrili*, which it most resembles in form.

Mychommatus cyaneus. Pl. VIII. fig. 3.

Nitidissimus, et supra et subtus læte cyaneus, elytris violaceo-cyaneis; capite leviter sparsim punctato; prothorace parum fortius punctato, disco fere impunctato, angulis posticis subrectis; scutello impunctato; elytris sparsim leviter punctatis,

* From $\mu\upsilon\chi\eta$, a recess, and $\delta\mu\mu\alpha$, the eye, in allusion to the canal along the inner margin of the eye.

striis irregularibus, sutura depressa et leviter lineata, humeris elevatis, lateribus sinuatis, apice denticulato, angulis suturalibus leviter mucronatis; subtus leviter transversim rugosopunctatus, albidis setis minutissimis instructus.

Long. 6 lin., lat. $1\frac{1}{2}$ lin.

Bright and shining, rich blue both above and below, the elytra violet-blue. Head very faintly and sparingly punctate; thorax a little more strongly punctate, but still very sparingly, a little more thickly in front, and almost impunctate on the posterior part of the disk; posterior angles nearly right-angled, basal lobe emarginate. Scutellum impunctate. Elytra sparingly and finely punctate, the punctures arranged somewhat longitudinally; shoulders rather prominent, an irregular depression inside of them; suture depressed, and with a fine line along it, and denticulate at the apex, about seven to nine denticuli fringing the rounded apex of the elytra. Underside finely transversely rugose, finely punctate, and bearing very minute whitish scales or setæ.

One specimen.

BELIONOTA, Esch.

Belionota Championi, Murr. Trans. Linn. Soc. 1862, xxiii. p. 451. Pl. VIII. fig. 4.

Not rare.

PSILOPTERA, Sol.

Psiloptera piperata, Murr. Trans. Linn. Soc. 1862, xxiii. p. 451. Pl. VIII. fig. 7.

Not very rare.

CHRYSOCHROA, Sol.

Chrysochroa elongata, Fab. Syst. Eleuth. t. ii. p. 200; Cast. & Gory, Buprest. i. p. 10.

One specimen received.

CHRYSODEMA, Cast. & Gory.

Chrysodema chrysochlora, Pal. de Beauv. Ins. recueill. en Afriq. et en Amér. 1805, p. 44; Cast. & Gory, Bupr. iv. p. 68. Pl. VIII. fig. 6.

One specimen.

Notwithstanding the great authority of Prof. Lacordaire, I cannot bring myself to merge the old genus *Chrysodema* with the typical *Chalcophora*, and therefore still keep Palisot de Beauvois's *C. chrysochlora* under the former genus.

[To be continued.]